



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,170	06/09/2006	Chung-Dam Song	240-37	5274
24336	7590	10/28/2008	EXAMINER	
KEUSEY, TUTUNJIAN & BITETTO, P.C. 20 CROSSWAYS PARK NORTH SUITE 210 WOODBURY, NY 11797			FAULK, DEVONA E	
ART UNIT	PAPER NUMBER			
		2614		
MAIL DATE	DELIVERY MODE			
10/28/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,170	Applicant(s) SONG ET AL.
	Examiner DEVONA E. FAULK	Art Unit 2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 October 2008.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,5,6,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,7,8 and 11-22 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,5,6,9 and 10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 September 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species 2, claims 5,6,9 and 10, in the reply filed on 10/6/2008 is acknowledged.
2. Claims 3,4,7,8,11-14,15-20 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ikeda (US 6,978,029).

Regarding claim 1, Ikeda discloses a condenser microphone employing a wideband stop filter for wideband signals of low frequency and radio frequency (column 6, lines 12-28; abstract; column), the condenser microphone having improved resistance to electrostatic discharge applied from outside and preventing radio frequency interference to decrease noise (abstract; column 6, lines 12-28), the condenser microphone comprising:

Art Unit: 2615

an acoustic module for converting sound pressure into an electric signal (capacitor comprised of elements 14 and 17 , Figure 3);

an amplification means for amplifying the electric signal input from the acoustic module (amplifier 34, Figure 3);

and an EM-noise-filtering/ESD-blocking section for blocking a wideband signal having low frequency and radio frequency output from the amplification means, blocking introduced electromagnetic waves, radio wave noise, and electrostatic discharge, the EM-noise-filtering/ESD-blocking section including one or combination of a resistor and a capacitor disposed between an input port of the amplification means and the acoustic module and/or between an output port of the amplification means and a ground, the resistor and the capacitor being connected in parallel or in series to each other (capacitor 21 and resistor 24 of Figure 3 form the EM-noise filtering/ESD blocking section; column 5, line 52-column 6, line 28; FET 19 reads on amplification means, Figure 3) the capacitor and resistor implicitly provide protection against electrostatic discharge, EM waves and radio wave noise).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2,5,9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (US 6,978,029).

Regarding claim 2, Ikeda discloses a condenser microphone as claimed in claim 1, wherein the capacitor and the resistor have a capacitance between 1pF and 100uF and a resistance between 10. Ω and 1 G Ω . (column 6, lines 17-20) respectively. Ikeda fails to explicitly teach that each of which can be selectively adjusted according to frequency band. The examiner takes official notice that it is well known in the art that a resistor and capacitor can be adjusted according to a frequency band. It would have been obvious to modify Ikeda so that the resistor and capacitor can be adjusted according to a frequency band for the benefit of providing the best protection for the microphone.

Regarding claim 5, Ikeda discloses wherein the EM-noise-filtering/ESD-blocking section comprises: a first capacitor connected in parallel between an output port of the amplification means and a ground port to function as a filter (capacitor 21, Figure 3; column 5, line 52-column 6, line 28) and a first resistor connected serially between an output port of the first capacitor and an output port of the second capacitor to perform a decoupling function (resistor 24, Figure 3; column 5, line 52-column 6, line 28).

Figure 3 of Ikeda fails to disclose that the EM-noise-filtering/ESD-blocking section has a shape of a character 'II' and of a second capacitor connected parallel to the first capacitor to perform an EM-noise-filtering and ESD-blocking function. Figure 4 of Ikeda discloses a second capacitor connected parallel to the first capacitor to perform an EM-noise-filtering and ESD-blocking function (capacitor 26, Figure 4). Regarding the

EM-noise-filtering and ESD-blocking section having a shape of a character \sqcap , Ikeda shows various forms of the EM-noise-filtering and ESD-blocking section having a shape of a character \sqcap , and in the shape of II . The examiner asserts that the applicant has provided no significance for the shape of the EM-noise-filtering and ESD-blocking section and asserts that it is a matter of design choice as to how this section is shaped. It would have been obvious to modify Ikeda so that the EM-noise-filtering and ESD-blocking section has a shape of a character \sqcap to meet a certain design specification.

(obvious to try)

Regarding claim 6, Ikeda discloses wherein: the first capacitor has a capacitance of 10 pF or 33 pF (capacitor 21 is 33 pF; column 6, lines 17-20) ; the second capacitor has a capacitance (Figure 4 teaches of including a second capacitor); and the first resistor has a resistance selected from the group consisting of 100 Ω ., 220 Ω , 330 Ω , 430 Ω , 620 Ω , 680 Ω , 820 Ω and 1K Ω (resistor 24 has a resistance Of 100 Ω ; column 6, lines 17-20)

Ikeda fails to disclose that the second capacitor has a capacitance selected from the group consisting of 1 nF, 1.5 nF, 2.2 nF, 3.3 nF, 4.7 nF, 6.8 nF, 10 nF, 15 nF, 22 nF, 33 nF, 47 nF, 68 nF and 100 nF. The examiner asserts that capacitance is a matter of design choice. It would have been obvious to modify Ikeda so that the capacitance of the second capacitor is one of the group above for the benefit of meeting a design specification.

Regarding claims 9 and 10, Ikeda fails to disclose a noise-blocking resistor between the acoustic module and the input port of the amplification means. The examiner takes

official notice that adding resistors to circuits to help block electromagnetic waves is well known in the art. It would have been obvious to add a noise-blocking resistor between the acoustic module and the input port of the amplification means for the benefit of providing better protection. Regarding the value of the resistance, the examiner asserts that is a matter of design choice. It would have been obvious to have the resistance of the noise-blocking resistor be from the group of 100 Ω , 1K Ω , 10 K Ω , 100K Ω and 1M Ω for the benefit of meeting a design specification.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/
Examiner
Art Unit 2614
10/20/2008